

Section 7 — Data Item Descriptions (DIDs)

1. NUMBER 319/DV1	DATA ITEM DESCRIPTION	2. QUANTITY 25 copies each plan
3. TITLE Release Segment/Element Integration & Test Plan		4. DATE December 21, 1990
5. DESCRIPTION <p>The Segment/Element Integration & Test Plan details the approach and schedule for integrating and testing each segment and element and verifying that the system complies with the ECS design specifications. The Plan identifies a schedule for performing such activities and the need for special resources. Describes responsible organizations. Provides the program manager and test personnel with a systematic approach to show that all of the requirements of the system have been satisfied by the integrated subsystems.</p> <p>This plan includes material at the Segment and Element level as appropriate.</p> <p>The Release Integration & Test Plan details the approach and schedule for integrating and testing each segment and verifying that the system complies with the ECS requirements specifications. This plan will include a systematic approach for I&T using Threads and Builds tied to the phased development of ECS releases. The Plan will address testing of the individual segment and system level integration of the ECS Release which includes end-to-end system testing of functions. The Plan describes the responsible organization and provides the program manager and test personnel with a systematic approach to show that all of the requirements of the system have been satisfied by the I&T program.</p> <p>This plan includes material at the segment and system level as appropriate with a preliminary release delineating the Thread/Build plan and objectives that are tied to the phased ECS development and integration activities. The preliminary plan provides a high level description of the Build/Thread tests sufficient to describe the integration process. The plan also provides schedule, resource needs, and a test overview/methodology for the ECS release being integrated.</p>		
6. FORMAT As required by Specification for Document Formats, 500-TIP-2110. Alternative format specifications require government review and approval.		
7. DELIVERY Approved processing tools; Approved electronic media.		
8. TYPE Document	9. SOW REFERENCE 3.3.5, 3.2.2.4 , 3.6.1	

1. NUMBER 322/DV23	DATA ITEM DESCRIPTION	2. QUANTITY 25 copies each test
3. TITLE Release Segment/Element Integration & Test Procedures		4. DATE December 21, 1990
5. DESCRIPTION Defines the step-by-step procedures for implementing each test identified in the Segment/Element Integration & Test Plan. Tests will cover segment/element operations and interfaces between elements. These test procedures shall define the specific objectives, event sequences, support requirements, configuration identification, and testing procedures for each test performed during segment/element testing. The Test Procedures defines the step-by-step procedures for implementing each test identified in the Release Integration and Test plan. The procedures will include identification of any deviations to the test plan since its last revision. Test will cover segment & system operations and interfaces. These test procedures shall define the specific objectives, event sequences, support requirements, configuration identification, and testing steps for each test performed during the release integration & test program. PRELIMINARY will include updated integration & test procedures completed as part of the incremental staged TRRs prior to the combined TRR/ETR milestone. The preliminary will also include the draft procedures for segment & system tests to be conducted between the TRR/ETR and the CSR milestones. The system level tests procedures shall demonstrate the operational capability of the ECS system and interfaces. FINAL will cover the "as executed" integration and test program procedures.		
6. FORMAT As required by Specification for Document Formats, 500-TIP-2110. Alternative format specifications require government review and approval.		
7. DELIVERY Approved processing tools; Approved electronic media.		
8. TYPE Document	9. SOW REFERENCE 3.3.2.1, 3.6.1	

1. NUMBER 324/DV3	DATA ITEM DESCRIPTION	2. QUANTITY 25 copies each report
3. TITLE Release Segment/Element Integration & Test Reports		4. DATE December 21, 1990
5. DESCRIPTION		
Documents the results of testing the hardware and software subsystems for each element.		
These test reports document tests performed at any level in the system. They contain test logs recording the exact history of the testing, include the name and number of all tests and the results of each test, describe in detail any deviations from the test procedures, and provide a detailed test history. They also contain an overall analysis (test evaluation) of the functional capabilities of the subsystems as demonstrated by the test and include any deficiencies, limitations, or constraints inherent in the subsystem that was detected during testing.		
Documents the results of the integration and test of the hardware and software for each ECS release.		
These test reports document test performed at any level in the release integration & test program. They contain qualitative and quantitative summaries of the testing, including test identification, names, and results of the test. They also contain an overall analysis (test evaluation) of the functional capabilities as demonstrated by the test and include any deficiencies, limitations, or constraints inherent in the subsystem that was detected during testing at the completion of the ECS integration & test program.		
The test report shall adequately summarize the results of verification tests and shall be prepared in such a manner that relates the test results to the verification requirements for each item under test. As a minimum, the following shall be included in the report:		
a. Test Identification. Identify the specific test as shown on the test procedure and a pass/fail assessment.		
b. References. Applicable System Test Plan and Test Procedures.		
c. Test Results to Include:		
1) Identification of those planned objectives for which actual test results were identical with the expected results and those which were within specified tolerance. For the latter case, actual test results shall be shown sumarized.		
2) Identification of those planned objectives for which actual test results differ from expected results beyond specific limits.		
3) Identification of any planned test objective for which actual results were not obtained. Reasons for not fulfilling such objectives shall be stated.		

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7. DELIVERY	
Approved processing tools; Approved electronic media.	
8. TYPE	9. SOW REFERENCE
Document	3.3.5

1. NUMBER 324/DV3	DATA ITEM DESCRIPTION	2. QUANTITY 25 copies each report
3. TITLE Release Segment/Element Integration & Test Reports		4. DATE December 21, 1990
5. DESCRIPTION (cont'd) <div style="margin-left: 40px;"> 4) Identification of any false or aberrant behavior noted during the test or subsequent analysis. Note that any such behavior that can prevent the system from accomplishing its mission objectives can be a basis for rejection. 5) Identification of requirements not tested or not verified and the rational for not testing a requirement. </div> <div style="margin-left: 20px;"> d. Recommendations. Recommendations for subsequent action shall be stated, based on the test results, and may include: <div style="margin-left: 20px;"> 1) Redesign of a particular component or computer program to enable the system to meet a specific requirement which was not fulfilled. 2) Revision to a Development Specification or the System Specification in cases where the test results disclose ambiguity or conflicting requirements. 3) Conducting additional tests to fulfill objectives for which results were not accepted. </div> </div> <div style="margin-left: 20px;"> e. Test Plan and Procedure Changes. Any deviations from the approved test plans/procedures that were followed during official conduct of the test shall be noted documented as revision pages to the affected documents and shall be appended to the report. Acceptance of the report shall also constitute acceptance of the appended changes. </div>		
6. FORMAT		
7. DELIVERY		
8. TYPE Document	9. SOW REFERENCE 3.3.5	

1. NUMBER 402/VE1	DATA ITEM DESCRIPTION	2. QUANTITY 25 copies each plan
3. TITLE ECS System Integration & Test Plan		4. DATE December 21, 1990
5. DESCRIPTION <p>Overview delineates the process for integrating the major ECS segments and elements and verifying that the ECS complies with the system design specification. Identifies a schedule for performing such activities and the need for special resources. Describes responsible organizations. Provides the program manager and test personnel with a systematic approach to show that all system specifications have been satisfied by the integrated subsystems.</p> <p>Final outlines the steps by which the implementation of the next ECS Release will be accomplished. This plan will include a schedule of the sequence of element Threads and Builds of the new ECS Release. The Plan will address testing of individual elements and system level integration of the new ECS Release which includes end-to-end ECS system testing of functions.</p> <p>This CDRL has been consolidated into CDRL 319/DV1.</p>		
6. FORMAT As required by Specification for Document Formats, 500-TIP-2110. Alternative format specifications require government review and approval.		
7. DELIVERY Neutral File Format; Approved electronic media.		
8. TYPE Document	9. SOW REFERENCE 3.6.1, 3.2.2.4	

1. NUMBER 403/VE1	DATA ITEM DESCRIPTION	2. QUANTITY 25 copies each specification
3. TITLE Verification Specification		4. DATE December 21, 1990
5. DESCRIPTION This document stipulates the specific portions or functions of the system design requirements (Level 3 and Level 4) to be demonstrated by each of the tests and analyses required by the Release System Integration and Test Plan (319/DV1) (402/VE1) and Acceptance Test Plan (409/VE1) providing a system level mapping of tests that will be performed for each implementation of the ECS Release.		
6. FORMAT As required by Specification for Document Formats, 500-TIP-2110. Alternative format specifications require government review and approval.		
7. DELIVERY Neutral File Format; Approved electronic media.		
8. TYPE Document	9. SOW REFERENCE 3.6, 3.7	

1. NUMBER 405/VE3	DATA ITEM DESCRIPTION	2. QUANTITY 200 copies
3. TITLE ECS System Integration & Test Report		4. DATE December 21, 1990
5. DESCRIPTION Documents the result of testing the system. Contains a log recording the exact history of the results of the tests. Describes in detail any deviations from the test procedures and provides a detailed test history. Contains an overall analysis (test evaluation) of the functional capabilities of the system as demonstrated by the test. Includes any deficiencies, limitations, or constraints inherent in the subsystem that were detected during testing. This CDRL has been consolidated into CDRL 324/DV3.		
6. FORMAT As required by Specification for Document Formats, 500-TIP-2110. Alternative format specifications require government review and approval.		
7. DELIVERY Approved processing tools; Approved electronic media.		
8. TYPE Document	9. SOW REFERENCE 3.6.1	

1. NUMBER 414/VE1	DATA ITEM DESCRIPTION	2. QUANTITY 200 copies
3. TITLE ECS System Integration & Test Procedures		4. DATE December 21, 1990
5. DESCRIPTION <p>Defines the procedures to accomplish system level end-to-end tests to demonstrate the operational capability of the ECS system and test the system interfaces. These procedures shall define the specific objectives, event sequences, support requirements, configuration identification, and test or series of tests performed during system testing.</p> <p>This CDRL has been consolidated into CDRL 322/DV2.</p>		
6. FORMAT <p>As required by Specification for Document Formats, 500-TIP-2110. Alternative format specifications require government review and approval.</p>		
7. DELIVERY <p>Neutral File Format; Approved electronic media.</p>		
8. TYPE Document	9. SOW REFERENCE 3.6.1	